

IN THE CLAIMS:

1. (Currently Amended) In a wireless local area network wherein mobile units are provided with radios for transmitting and receiving data communications messages between said mobile units and fixed access points, and wherein said mobile units are located using signal strength for radio communications between said mobile units and said access points,

a system wherein at least some of said access points are provided with antennas having antenna patterns with selected pattern shape for enhancing location of said mobile units, said selected pattern shapes include horizontally offset non-intersecting directional antenna patterns, wherein no portion of at least one of the non-intersecting antenna patterns with sufficient signal strength to enable location of said mobile units overlaps a portion of another of the non-intersecting antenna patterns with sufficient signal strength to enable location of said mobile units.

2.-7. (Canceled)

8. (Previously Presented) The system as recited in claim 1 wherein said horizontally offset directional beams are horizontally offset in position.

9. (Previously Presented) The system as recited in claim 8 wherein at least some of said antennas are mounted near the periphery of a facility.

10. (Previously Presented) The system as recited in claim 8 wherein said directional beams are
offset in position to correspond to aisles in a facility.

11. (Previously Presented) The system as recited in claim 1 wherein said antennas are located at selected heights for achieving said selected pattern shapes.

12. (Previously Presented) The system as recited in claim 1 wherein an axis of each of said directional antenna patterns are arranged in parallel relation to one another.

13. (Previously Presented) The system as recited in claim 1 wherein a first group of said directional antenna patterns radiate between a second group of said directional antenna patterns.

14. (Previously Presented) In a wireless local area network wherein mobile units are provided with radios for transmitting and receiving data communications messages between said mobile units and fixed access points, and wherein said mobile units are located using signal strength for radio communications between said mobile units and said access points,

a system wherein at least some of said access points are provided with antennas having antenna patterns with selected pattern shape for enhancing location of said mobile units, said selected pattern shapes include horizontally offset non-intersecting directional antenna patterns, and wherein a first group of said access points are arranged in an opposing interleaved pattern relative to a second group of said access points.